## ABSTRACT

There are provided a cathode voltage control unit 10 which controls a cathode electrode so as to uniform electron emission from the cathode electrode and a gate electrode driving unit 12 which changes a voltage of the gate electrode in response to video signals. The cathode voltage control unit 10 charges a capacitor by a constant current and determines a cathode voltage by controlling charging time. The gate electrode driving unit 12 performs ON/OFF control of the gate electrode by complementary connection.